AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 10, line 19 as follows:

Fig. 9 is a schematic diagram of probe 1 which being used. Measuring stick 25 having probe 1 mounted thereto is dipped into culture solution 21 stored in container 14. Target cells 20 float in solution 21. Reference electrode 18 contacts solution 21 in container 14, thus sensing an electric potential of solution 21 in container 14. Probe 1 is positioned so that sensor element 4 eacan be dipped in solution 21.

Please amend the paragraph beginning on page 15, line 27 as follows:

Cavity 506 is connected with flow passages 509 and 510 communicating with the outside. Flow passage 509 has opening 511 thereof provided in upper surface 502C of plate 502. Flow passage 510 has opening 518 thereof provided at upper surface 502C. Flow passages 509 and 510 communicate with the outside of plate 502. Molded plate 502A previously molded is stuck on molded plate 502B previously molded, thus providing plate 502 of complexity. Flow passages 509 and 510 having groove shapes are provided in molded plate 502B. Openings 511 and 518 shaped like through-holes are provided in molded plate 502A. Cavities 503 and 506 provided in molded plate 502A are shaped like a through-hole and communicate with each other.

Please amend the paragraph beginning on page 17, line 7 as follows:

Well array 520 is placed on upper surface 502A of plate 502. Well array 520 has a predetermined capacity for receiving, storing, or circulating liquid, such as culture solution and chemicals, therein. Well array 520 has wells 522, 523, and 524 provided therein. Lower surface 522A of well 522 has through-hole 521A provided therein and communicating-communicates with opening 511 of flow passage 509. Lower surface 523A of well 523 has through-hole 521B

provided therein and eommunicating communicates with through-hole 508 provided in thin plate 507 of sensor element 504. Lower surface 524A of well 524 has through-hole 521C provided therein and eommunicating communicates with opening 518 of flow passage 510. Wells 522, 523, and 524 have openings 522B, 523B, and 524B at their tops, respectively, for receiving culture solution or chemicals. Reference electrode 514 is provided in well 523. Measuring electrode 515 is provided in flow passage 510 and is drawn out to the outside of plate 502.